

Notice of Allowability

Application No.

09/911,375

Applicant(s)

FURUKAWA, HIDEYUKI

Examiner

Esaw T. Abraham

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/06/05.
2. ☒ The allowed claim(s) is/are 2-3 and 7-9 (re-numbered as 1-5).
3. ☒ The drawings filed on 25 July 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

ALBERT DECADEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

no

DETAILED ACTION

1. Claims 7-9 have been previously allowed.

Examiner's statement for reason for allowance

The following is an examiner's statement for allowance:

2. Claims 2 and 3 have been allowed.

As per claim 2:

The prior art (U.S. PN: 6,526,537) of record, Kishino a storage capable of generating an ECC for data and adding the ECC to the data to thereby form a read/write unit includes a writing circuit for generating an ECC for N of write data received from a host, adding N equally divided ECC code parts to the N write data, respectively, to thereby form N write units, and writing the N write units to N continuous addresses of a semiconductor memory device, respectively. A reading circuit gathers the N equally divided ECC code parts contained in read data units read out of the N continuous addresses of the semiconductor memory device to thereby reconstruct the ECC, and corrects errors of the N read data units with the reconstructed ECC (see col. lines 3-16). However, the prior art taken singly or in combination fail to teach, anticipate, suggest, or render obvious writing an ECC code causing an ECC error in a predetermined area of the initial defective block, wherein said step of writing an ECC code includes the steps of: suspending an ECC generation function internal to said semiconductor memory device, and writing the ECC code from an exterior of said semiconductor memory device. Consequently, claim 2 is allowed over the prior art.

As per claim 3:

Art Unit: 2133

The prior art (U.S. PN: 6,526,537) of record, Kishino a storage capable of generating an ECC for data and adding the ECC to the data to thereby form a read/write unit includes a writing circuit for generating an ECC for N of write data received from a host, adding N equally divided ECC code parts to the N write data, respectively, to thereby form N write units, and writing the N write units to N continuous addresses of a semiconductor memory device, respectively. A reading circuit gathers the N equally divided ECC code parts contained in read data units read out of the N continuous addresses of the semiconductor memory device to thereby reconstruct the ECC, and corrects errors of the N read data units with the reconstructed ECC (see col. lines 3-16). However, the prior art taken singly or in combination fail to teach, anticipate, suggest, or render obvious writing an ECC code causing an ECC error in a predetermined area of the initial defective block, reading data from the initial defective block after said step of writing an ECC code; performing an ECC check on the read data, and rejecting said semiconductor memory device as being defective if an ECC error is not detected. Consequently, claim 3 is allowed over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Art Unit: 2133

3. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Esaw Abraham whose telephone number is (571) 272-3812. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are successful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for after final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Esaw Abraham
Esaw Abraham

Art unit: 2133

Albert DeCady
ALBERT DECADY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2133